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F A R M • S C H O O L • H O M E



Canadian Dairying And The United States Market

Of all the Canadian dairy products exported to the United States in sizeable quantities during past years, cheese and casein are the lone survivors, and of these cheese may be exported only in restricted amounts.

This is a serious situation for eastern Canada where dairying is a major industry. In the long run the situation may take care of itself, for the increasing urbanization of our population will inevitably increase the domestic market for these products. This is a comparatively slow process, however, and the question which immediately arises is; what are we going to do in the meantime?

To better understand the situation let's see how and why we came to rely so heavily on a single market for the disposal of our exportable surplus of dairy products.

World War II played havoc with what were and still are considered as normal trading relations between nations. The nations with dollar currencies became more dependent upon each other while trade with the rest of the world, and Europe in particular, was cut off. Since the war, although the productive capacities of the western European nations has been restored, they still suffer from a serious dollar shortage for the payment of goods purchased in the dollar area.

Thus seven years after the end of the war, there has been little change in the ability of the dollar nations to trade outside the dollar area unless they were willing to take goods in exchange for goods, invest heavily in the non-dollar areas or make loans so that non-dollar countries may purchase essential requirements in the dollar area.

All this is, of course, well known to farmers and farm organizations alike, but the main fact which farm organizations do not seem to have grasped, judging by their continual pronouncements on the subject, is that this situation may not be so abnormal as they think. The world does not stand still, and relationships between nations change as inevitably

as night merges into day. It may well be that this so called imbalance in our trading relationships is here to stay.

There are several factors which point in this direction. For instance, the vast increase in and efficiency of the United States' industrial machine may well offset the lower European wage scale thus making trading more difficult, and the same may be said of Canada to a more limited but increasing extent.

We are not pricing ourselves out of any market, rather we are becoming so proficient at the techniques of mass production that we can compete in any market. What we are doing in making it more difficult for the rest of the world, and Europe in particular, to trade with us on anything like even terms except, of course, in certain highly specialized lines.

If this is so, then we are up against an entirely new situation which demands an entirely new approach. The old rules won't work, we need a new set.

Now let's get back to our original question. What are we going to do? We can do several things. We can push our trade with non-dollar areas to the limit of their ability to pay and our ability to absorb their produce. We can spend time and money developing markets for canned and powdered dairy products in South America, but the crux of our situation is how are we going to deal with the United States?

Why not let us work toward the establishment of an International Joint Commission whose job it would be to regulate and arbitrate trade, and any disputes arising therefrom between our two nations? This is not as fantastic as it may sound. We already have given up some of our national powers to the Commission which regulates boundary and water disputes between us. We both accept their verdict. We are both giving up selfish sectional interests for the benefit of the whole. This is fully in line with our contention that we need a new set of rules. It may pay farmers and farm organizations alike to discuss the problem from this new angle.

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Rural Water Supplies — A Health Hazard — Part 2

by F. S. Thatcher



Here is a close up of the waste disposal from a chicken canning plant. Note the fragments of skin and bone, an open invitation to rats, flies and other vermin.

OPERATORS of plants, for example, cheese or canning factories, have a two-fold problem. They need such large quantities of water that waste disposal becomes a real problem. In cheese factories, for instance, milk wastes tend to clog tiles and septic tanks very quickly.

If we don't get rid of waste efficiently it may pollute neighbourhood water supplies and will certainly act as a source of infection for it will attract numbers of flies and rodents.

These are well recognized as carriers of disease germs so that the net result of the poor waste disposal is likely to include one or more of the following health hazards:

1. Disease germs get into the neighbouring drinking water supplies,
2. The factory supply becomes polluted so that disease germs find their way into the foods being prepared.
3. The factory workers are exposed to the risk of infection.
4. Contaminated water within the factory will give rise to spoilage problems no matter if the factory is canning tomatoes or chicken or making cheese or butter.

Anyone planning to put in a new well or any type of sewage disposal system would be advised to contact his local sanitary inspector or else get in touch with the Department of Health of his Province. Valuable assistance and literature will be forthcoming. Many details need to be worked out, but there are a few general principles that always apply.

What Kind of Well

A drilled or "driven" well is usually safer than a dug

Water is everywhere. It can be man's best friend or worst enemy — all depending upon how it is handled.

well, and a deep well safer than a shallow one.

Surface water is usually contaminated with harmful bacteria, but water which has had to pass through soil for a considerable distance is usually safe. The pipe in a bored or driven well passes right through the sub-soil into a water-bearing layer and if care is taken to seal and protect the surface properly, harmful bacteria are not likely to get into the water unless the underlying water is fed with barnyard or other polluted water that reaches it through a deep crack or fissure in surrounding surface strata. A new location is about the only answer to this.

Dug wells are much more liable to surface contamination, especially if the upper 10-12 feet are not water-proofed to prevent seepage from the surface. A newly dug well may be made of cylindrical cement "castings" which should be set in concrete. Vitrified tile is often used. Poured concrete (with adequate footings) also will make a good job. Brick or stone, plastered on the outside, has also been recommended for the upper part of the well-lining.

The safety of existing old dug-wells may be improved by replacing the upper 10-12 feet of cribbing with carefully sealed cement "cinder blocks", or with cylindrical cement castings. New cribbing of thoroughly-sealed glazed tile may be installed outside the old stone cribbing, which should later be removed. The space between tile and soil should be filled either with concrete or with puddled clay.

Whether old or new the top of a dug well should always be covered with cement that slopes steeply enough to assure "run-off" or else is curved with a slight domed effect. The pump should be securely bolted to the cement preferably with a tight sealing gasket between the metal and concrete. The cement cover should have a manhole, the edge of which carries a flange sticking upwards. Fitting tightly around this flange should be a cement cover that has no opening in it. The top of the well should always be a little higher than the surrounding soil. This should be made to slope away from the well in all directions.

Where to Dig

In most farming districts of Eastern Canada a water-bearing layer of porous material may be tapped simply by drilling a well to suit convenience and safety. In other areas water-bearing sub-strata may be located in "pockets". Where this is true, the only sure way to locate a well is by drilling to find out. "Water-diviners" are a

poor bet. The experience of the local well-drillers who make a practice of understanding where to expect to find water make them the best people to consult. The depth of well likely to be needed and the capacity to be expected is best found by consulting neighbours and the local drillers, for as a rule, water is available at much the same level in any particular area.

A well should never be placed less than 50 feet away from a privy, a cess-pool, a septic tank disposal bed, a barnyard, a manure pile, or a garbage dump. It is best placed so that run-off water from any of these places cannot reach it. It should not be near a ditch or stream that does receive the polluted "run-off" water from such places, and preferably should never be near a swamp. In soils of open, gravelly nature, the 50 feet mentioned above as a safe distance should be at least doubled. The same is true where limestone strata are not far below the surface.

Keeping the Bugs Out

Once you have established what seems to be a source of safe water, try to keep it that way. Keep the area around the well clean. Hens represent one of the best sources of the germs *Salmonella* species. These germs in drinking water are likely to cause serious enteric fevers in humans, sometimes in cattle. Hen droppings have no place around a well. Fill up any depressions in the soil around the well that could fill up with stagnant water. Always keep the well in such repair that no opportunities are provided for harbouring rats and mice for they may carry dysentery germs.

If you have to occasionally prime the pump to get it started, use only water of drinking quality, otherwise boil the water first, and have the well water tested at least in the spring and fall. Write to the Provincial Department of Health they will send you the necessary sterile sampling bottle.

Plastic Piping That Lasts Forever

POLYTHENE plastic piping estimated to last almost "forever" is exciting the interest of agriculturalists. The piping is said to be resistant against rot, rust and action of soil acid and alkalis. It will not burst when water freezes inside it since the flexible wall will expand with the freezing and return to its original shape after thawing. The polythene plastic itself is in no way affected by low temperatures.

According to C-I-L Agricultural News, the polythene piping can be used for home and livestock water systems, well casings and low-pressure underground piping, and spray or irrigation systems. One outstanding feature is its light weight which reduces shipping costs and facilitates



This is the well from which water is pumped to the plant. There is every chance in the world of infection starting here.

Test Your Water

If you are ever in doubt about the quality of the water, or you recognise a sudden change in the flavor or appearance, get it tested right away, don't wait for the spring or fall, and in the meantime don't drink a drop unless it has been boiled or chlorinated first.

Remember at all times that diseased material should never be placed near a water source nor dumped on a manure pile. I once heard of a man who dragged a dead calf half way across a yard and left it near the well. The mother of the calf had Bang's disease (contagious abortion). The same germ causes undulant fever in humans. Perhaps it is not surprising that three members of the man's family developed this disease. You can't be too careful, he just never thought when he left it near the well, but we can't afford to make mistakes like that for it is the lives of our families that are at stake.

handling. A one and one-half inch plastic pipe 250 feet long weighs 80 pounds compared to the 640 pounds a galvanized steel pipe of the same dimensions would weigh. It would take a truck to transport the metal piping while one man could carry the polythene pipe rolled up on one shoulder.

No hacksaw problems are encountered with polythene piping since it can be easily cut with a knife. Conventional plastic fittings or a new welding technique can be used for joining plastic to metal pipe. Plastic piping is not designed for high working pressures.

In Canada polythene piping is being tried experimentally by municipal water systems at Dunnville and Oakville, Ont. At Dunnville 1,600 feet of pipe were laid six inches underground and allowed to freeze and unfreeze throughout the winter. After two years use it suffered no adverse effects.

It's Freezing Time For Small Fruits

by J. David

When frozen, strawberries, raspberries and blueberries keep their fresh natural flavor locked in so that we may enjoy summer flavor and freshness all the year through.

AN increasing number of products, from bread and pie crusts to meats, vegetables and fruits can be frozen when they are in season or cheapest in price, but none turn out a more delicious product than the small fruits. All the delicious mouth-watering goodness of the strawberry, raspberry or blueberry is ours for the taking, whether it be June or January, when we reach into the freezer for a package of our favorite small fruit.

They're easy to freeze too, a few simple rules are all we need to know and two of these are general for all products, namely, freshness at the time of freezing and the speed with which we carry through the operation.

Strawberries

Strawberries for freezing should be firm, ripe and well colored, for best results they should be frozen as soon after picking as possible, that means within a few hours anyway. If you have to hold them over this period, keep them in the coolest place possible.

The freshly picked berries are hulled and sorted and all immature, over-ripe or damaged fruit discarded. The hulled fruits are placed on a tray and washed with a gentle spray of cold water. That word gentle is important, for if the spray is too strong the fruit will be damaged. Dip washing is sometimes tried, but it isn't always satisfactory either for unless the batches dipped are small crushing of the berries may occur.

Whole strawberries are packed after washing and draining. A sugar pack consisting of three to four pounds of fruit to one pound of sugar gives a very satisfactory product. A syrup pack may also be used, just pour enough on to cover the berries completely. Holding the packed fruit for a few hours at a temperature just above freezing improves the quality of the frozen berries since it allows the sugar or syrup to penetrate. A still more flavorsome pack is obtained if the strawberries are sliced or crushed and then packed with sugar in a proportion of four to one. Mix the sugar in until it dissolves and then freeze the package immediately.

Packaging must be done in water and moisture-vapor proof cartons. The former will stop the syrup from leaking out into the freezer or locker, the latter stops the product from drying out during freezing storage. Rapid freezing and zero degree F. storage is essential for long storage life of the product.

Raspberries

Choose only firm, ripe raspberries that are bright red



Frozen storage plants are springing up all over the country.

in color, juicy and rich in flavor. Varieties with large seeded drupelets or with drupelets separating readily should not be used.

After picking, the berries are sorted to remove immature and over ripe fruit. They are then washed gently in cold water, thoroughly drained and packed with sugar in a four or five to one proportion or with chilled medium strength syrup adding just enough to cover the berries completely. Mixing the sugar with the berries, the fruit being crushed slightly in the process, seems to improve the flavor and color. This is apparently due to the penetration of the berries by the sugar.

Packaging is carried out in the same way as with strawberries.

Blueberries

Both wild and cultivated blueberries make a very good frozen product.

Blueberries should be handled carefully so that the fruit will retain its natural bloom. Thoroughly clean and inspect the fruit to be frozen so as to remove all small, immature, dried-up and damaged fruit. Remove all leaves and stems then wash and drain the good berries.

Very good results can be obtained by freezing blueberries without the addition of any sugar. The use of dried sugar does not apparently protect the flavor as it does with strawberries and raspberries. However, the addition of a syrup does seem to help when the berries are stored long periods. Packaging is carried out as for other fruits.

It's Easy to do Too

It's easy to freeze small fruits for they don't require any special equipment or sterilization by heat, and in addition the color, flavor and nutritive value are retained to the highest point.



Blueberries make a delicious frozen fruit.

It must be remembered that frozen products in general are not sterile, for example, small fruits left at room temperature too long after thawing may ferment, they should, therefore, be kept in the frozen state until used. If they are to be eaten as fresh fruits, they will be at their best if thawed only to the point where a small amount of ice is left in them.

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The Shepherd's Calendar

by W. H. Hough and S. B. Williams

July

Plant rape. If good quality aftermath will not be available for pasture during late August and September some succulent crop such as rape or kale should be planted in July. The pasture will serve as a finishing or fattening feed for market lambs and as a flushing feed for breeding ewes.

Watch for "Pink-Eye" (Keratitis). It is characterized by a copious watering of the eye, followed by a white scum forming over the eye ball. This is a contagious disease and a veterinarian should be called if the symptoms appear.

Cut weeds such as burdocks, stick burrs and wild raspberries which grow in fence corners and on pastures. The presence of burrs and other vegetative matter in the fleeces reduces their grade and value. Repair feed racks, troughs, doors and walls of pens. Prepare straw storage space to permit of easy access during winter. Have chutes so located that straw does not fall on the sheep when they are being bedded. Sweep walls and ceilings of pens and have them white-washed.



Don't forget to cut those weeds.

Supplement Grass For High Milk Production

EVEN on good pasture milking cows in high or medium production should receive grain supplement if the milk flow is to be maintained. Cows on pasture will consume from 90 to 150 pounds of grass daily. The upper extreme of this amount, under good grazing conditions, will support a cow weighing 1,200 pounds and producing about 38 pounds of milk daily, based on feeding standard recommendations. Average grazing supplies nutrients for a yield of 20 pounds of milk daily or less for a cow of this weight. It is evident therefore that some supplement is necessary even during the lush pasture growth of spring.

The procedure followed at the Central Experimental Farm, Ottawa, is to feed no grain to cows producing less than 20 pounds of milk daily. Cows producing over 20 pounds of milk daily are fed a supplementary grain allowance at the rate of one pound for each five pounds of milk, for cows in the range of 20 to 35 pounds production, and at the rate of one pound of meal for each 3 pounds of milk for those producing over 35 pounds daily.

Experiments have shown that during periods of lush growth, as in the spring, the protein content of the pasture herbage is almost twice as high as during periods of dry weather which occur as the season advances. It also has been found that cows milk better if the lush, high protein grass is supplemented with feeds low in protein. In fact there is evidence that the high protein content of pasture herbage during the early season grazing may even reduce production. A safe practice then is to use a low protein



supplement of oats and barley for the month after the cows are first turned out. As the season advances high protein supplements such as linseed oilmeal should be added to the oat-barley grain ration at the rate of one part of linseed oilmeal to each three or four parts of oats and barley.

Salt should be available either in blocks or fed in the meal.

During periods of dry weather, which often occur in July and August, a further supplement of silage or hay is often necessary. Experiments at Ottawa have shown that with cultivated pasture, excess grass growth can be cropped in mid-June, cured as silage, and fed to the cows during such dry periods.

Farm Journalism Loses A Leader

Roderick S. Kennedy, B.S.A. '12, a member of the second graduating class at Macdonald College, passed away suddenly in Montreal on May 18th.

Mr. Kennedy put his agricultural training to good use, having held a position on the staff of the Family Herald and Weekly Star since 1922, being Editor-in-chief for the past fourteen years. To his theoretical training from Macdonald he added practical experience as assistant superintendent of the Experimental farm at Lacombe, for some years after graduating, following which he operated his own farm on a ranch in Lacombe until he enlisted at the outbreak of the first world war. After the Armistice he headed the Fleming Convalescent Home in Ottawa, then served as the Ottawa district vocational officer in the Soldiers' Civil Re-establishment Department until he joined the

Family Herald. His experience in re-settlement gained after the first war enabled him to make constructive suggestions when the present Veterans' Land Act was being drafted.

Always interested in literature, he was the author of a number of short stories and articles and one of his books won the Quebec Prize for English fiction some years ago. He was a member of the executive of the Canadian Authors' Association, of which he was national president for two consecutive terms, and served for a number of years as president of the Montreal branch of the association.

To Mrs. Kennedy, who is also a graduate of the College, and to his sister, Mrs. L. Barrett, we offer our sincere sympathy.

More Beef For Your Feed Dollar

by P. E. Sylvestre

In the first of these articles we talked about a plan which takes a lot of the guesswork out of beef raising. In this concluding article the author tells how the plan works on the farm.

THE real test for finding out whether a plan is successful or not depends upon how it stands up on the individual farm. This plan is off to a head start because basically it is quite simple.

Starting from his existing foundation stock, the cattle breeder puts all his bull calves on feed. Having recorded the rate of gain and the feed consumption of each individual, he keeps for breeding purposes the ones which gave the best results. He may even go a step further. As the progenies of these bulls become available, they can also be tested and the results related back to their sire. Thus, in addition to the feedlot performance of the bulls themselves, he has the performance of their sires.

Obviously this procedure can only be applied properly in fairly large herds where sire comparisons are possible, and where future sires can be selected from the herd without danger of too much in-breeding. In small herds, the method could be used with a slightly different purpose. Bull and heifer testing should be done: first, to select the best performing females, and second, to provide future sires to be offered for sale with a performance index in addition to their external qualities.

A better plan perhaps would be for some organization to undertake the feeding of bull calves in a central place under uniform conditions. The official performance record then could be used as a basis of evaluating the individual animals. A number of these feeding stations are already in existence in the United States, and there is one in Ontario.

Whether operated by a breeder or an organization, the testing method is essentially the same and if properly applied should give a fairly accurate index of the performance of the animals submitted to the test.

Record of Performance Procedure for Beef Cattle

The general aim is to help breeders in developing more efficient strains of beef cattle. The procedure is as follows:

General Management

- (a) From birth to weaning all calves will be fed and treated alike.
- (b) Dams not milking sufficiently to properly feed their calves will be culled.
- (c) All young stock will be handled uniformly as to housing and grazing.
- (d) Weaning should take place around 450 pounds for heifers and 500 pounds for bulls or steers.



Better planning means better chances of success in building and maintaining a good herd.

- (e) Full feeding of heifers up to 850 pounds and bulls and steers up to 900 pounds. Individual feeding should be the rule. If group feeding is the only possibility, the calves from one sire will be fed as a group for a period of not less than six months, but ages should not vary more than 45 days.

Records

- (a) Identification and pedigree of each animal.
- (b) Weight at birth.
- (c) Weight and age at weaning.
- (d) Weight at end of feeding period.
- (e) Feed consumption.

Performance Evaluation

The evaluation of the individual calf will be based on the following data:

- (a) Gain during nursing period.
- (b) Gain during feeding period.
- (c) Feed per 100 pounds gain.

Likewise, the evaluation of the dam will be based on her calf's performance in the feedlot. However, emphasis should be given to the calf's gain during nursing, as it is an indication of the milking ability of the cow.

Finally, the sire may be evaluated through the performance of his calves in gain and in feed consumption during the feeding period. This is the progeny performance test which will decide his value as a possible improver of the breed.

Although emphasis is being given to performance as it should be, type and conformation should not be neglected. A careful visual appraisal of the calves should be made at weaning and at the end of the feeding period.

It is realized that such a plan may result in extra equipment, more work, and certainly extra expense. However, it is the writer's conviction that the additional expense will eventually pay large dividends.

Performance testing is not an end in itself. It is only an additional tool in the hands of the breeder to discover with greater certainty, the best sires or dams.

Cooking Quality In Potatoes

COOKING quality of potatoes depends primarily upon the variety grown and the fertility practices followed. Though other factors do influence quality, variety and fertilizer practice are perhaps the most important. Fortunately both can be controlled by the grower. A good quality potato should be mealy when cooked, uniformly white or cream in colour and of pleasant flavour.

It is generally accepted that the specific gravity of potato tubers is correlated with the cooking quality. The higher the specific gravity, the greater is the starch content and the more mealy the potato when cooked. Hence, for practical purposes, the starch content is a reliable indication of the cooking quality of any given sample.

According to experiments conducted at the Fredericton Experimental Station over a period of years, potato varieties differ greatly in their starch content, when grown under same conditions. The old variety Green Mountain and the new varieties Keswick and Canso rate high in starch content and hence have good to excellent cooking quality. Sebago and Katahdin are only medium in this respect, and Chippewa, Bliss Triumph and Pontiac are low in starch and poor in cooking quality. Because of this varia-

tion in quality between varieties, housewives are advised to purchase table-stock potatoes by variety as well as by grade.

However, the quality of potato produced by any grower depends not only upon the variety grown, but also upon the fertility practices adopted. In general, potatoes grown with barnyard manure will have a higher starch content than those grown with commercial fertilizer. Moreover, as the rate of application of commercial fertilizer increases, there is a corresponding decrease in starch content. Excess potash also results in potatoes with a low starch content and the use of fertilizers containing more than 10 per cent potash is not recommended under average New Brunswick conditions.

Growers, who are interested in producing a high quality table potato are advised to first of all plant a high starch variety, and secondly to fertilize the crop wisely. A combination manure and commercial 6-9-9 or a 5-10-10 fertilizer at the rate of 1600 pounds per acre. Higher rates of application, or the use of a fertilizer with a higher potash content, will under average conditions, result in a crop with lowered starch content and hence, poorer cooking quality.

Canada's Sheep Industry Could Be Expanded



We can support a lot more than our present sheep population.

Wool is a modified form of hair, growing much as hair does. It has a root lying below the follicle or pore and it is nourished by the blood. Growth through new fibres continues as long as the sheep is growing. At maturity to old age, most sheep produce a finer but weaker fibre due to curtailed nourishment.

Because wool is a protein its production is directly influenced by proper feeding methods. Two glands located

at the base of each fibre secrete oil to lubricate the fleece, this oil being generally known as yolk. Fleeces lacking yolk become cotted or matted together and lack of yolk is a direct indication of the animal's health. A dry harsh matted fleece is an indication of fever or some physical ailment.

Secretion of yolk while common to all breeds is greater in the finer woolled breeds. Merinos have as high as 60 per cent yolk against 40 per cent for Lincolns. The amount of yolk affects the clean yield of the fleece because the fine wools with more yolk take up more dirt and therefore have a greater shrink when cleaned. Wool is purchased on its clean yield, even if the price is quoted on the greasy basis, because buyers know what each grade should yield.

Canadian wool producers are fortunate that Canada has a most modern and accurate wool grading system, leading all countries in grading and pricing methods. In 1941 a report on the sheep industry recommended that the then haphazard system of wool handling be revised. This brought into being the Canadian Co-operative Wool Growers Ltd., a producers organization, which since that date has handled the bulk of the wool clip. Local or branch grading stations advise farmers how to shear, roll and pack wool for best grading and either advance funds against the clip or make full settlement when the wool is graded and sold.

The wool clip of 1951 was slightly over 9 million pounds while domestic disappearance was about 87 million pounds. The balance was imported either raw, partly processed, or as goods. To meet Canada's annual needs wool from over 12 million sheep would be required. As the present population is about 2 million, the industry could be expanded vastly before annual requirements would be met. That sheep raising has an almost unlimited future for generations to come is the opinion of many now interested in this almost forgotten phase of livestock production.

Heat lamps and farrowing stalls will save baby pigs . . . Cattle are sometimes poisoned when they lick fresh paint or eat old paint flaking off barns, gates and fences . . . Ensure the crop by sowing certified seed . . . Falls cause most farm accidents . . . Farm labour costs four times what it did 20 years ago . . . The number of cows being bred artificially is increasing . . . The I.F.A.P. says that New Zealand leads the world in farm production per man hour . . . Pasture pays off in higher livestock gains on fewer acres . . .

Information Please! ★ ★ ★

This section should make interesting reading, for it is given over to the problems of our readers. Problems sent in by Farm Forum and other groups will be answered here.

Hog Cholera

THE recent outbreak of Hog Cholera in Ontario has got farmers worried. What is the disease, how do you control it? Dr. Orlan Hall, Assistant Veterinary Director General Department of Agriculture, gives us a history of the disease in Canada right up to the present time.

As far back as 1903, Dr. Hall pointed out, it was suspected that uncooked garbage used as feed was responsible for outbreaks of hog cholera in Canada. In 1912 the situation was studied by the Chief Veterinary Travelling Inspector for Canada, the late Dr. A. E. Moore, and later a Report was presented to Dr. A. E. Rutherford then Veterinary Director General. It was this Report which became the basis of present-day legislation on garbage feeding, which has helped to reduce hog cholera in Canada to a minimum.

To the present-day hog raiser with his efficient methods of feeding, the conditions shown in the Report are almost unbelievable. And in almost every case outbreaks of hog cholera were traced to the feeding of uncooked garbage. One extract from the Report is sufficient to show the danger which then existed not only through the feeding of garbage itself, but through the possibility of infection being spread to healthy premises.

"In August 1908" states Dr. Moore's Report, "hog cholera occurred on a farm at Toronto. Some 400 hogs died and 717 sick and contacts were slaughtered. The manager informed me that he had not bought a hog for nearly a year, and then only some boars from a farm where hog cholera had never been known to exist. No other hogs had come in contact with his since then. The owner had fed his swine on hotel refuse. On examining this I found it contained nearly every conceivable thing, such as uncooked pork rinds, ham and sausage, poultry bones and bacon, chicken and other fowl viscera, beef refuse, mutton and veal refuse, besides all kinds of vegetables and slops. I am at a loss to know the origin of this outbreak unless it came through contaminated food."



The spread of disease among our domesticated animals means serious trouble unless it is halted immediately. These young fellows have started off enjoying life anyway.

In concluding his report Dr. Moore describes the revolting conditions associated with the actual feeding of such material, and his concluding paragraph reads, "I believe that this material should not be allowed to be fed except under strict supervision, not alone from the serious danger of spreading the hog cholera infection, but also from a sanitary standpoint."

Dr. Moore's recommendation was soon to be acted upon, as the information over the years proved conclusively that the feeding of uncooked garbage was a frequent cause of hog cholera and had been responsible for many serious outbreaks of the disease. As a result, it was decided to limit this practice to those who were willing to cook garbage and to maintain their hog pens in a sanitary condition.

The following regulation was passed in 1915, "The feeding of swine upon garbage, either raw or cooked, obtained elsewhere than on the premises where fed, is prohibited unless special permission in writing is first obtained from the Veterinary Director General."

This first effort to prevent hog cholera by legislating against feeding garbage was along the right lines. It has been amended and tightened through the years and today the law prohibits the feeding of collected garbage to swine unless the owner first has in his possession special permission in writing which is in the form of a licence granted

under authority of the Animal Contagious Diseases Act. The owner must agree to boil thoroughly all garbage before feeding it to swine and prevent his swine from having access to uncooked garbage; to maintain his swine in a clean, sanitary condition; to sell no hogs except for immediate slaughter; and to notify the Veterinary Director General without delay if sickness appears among his swine. Regular inspections are made to see that those who hold licences are living up to the terms of their agreement and no time is lost in instituting prosecutions if the Regulations are not being observed.

There have only been two cases of hog cholera in Canada in recent years, one in 1946 when 44 hogs were slaughtered and another in 1951 involving two premises and the slaughter of 112 hogs. In the later instances the source

of infection was definitely traced to improperly cooked garbage or some portion of the garbage which reached the hogs in a raw state.

Apart from the control of hog cholera, it is obvious, said Dr. Hall that cooking of garbage is a major factor in preventing the dissemination of other virus and parasitic diseases of livestock and poultry, a point not only of importance to the livestock producer but to the nation as a whole.

An interesting sidelight mentioned by Dr. Hall is that no garbage from foreign steamboats or aircraft can be collected and fed to swine or other livestock. Such material must be destroyed under supervision of a health of animals official. No chance is taken of introducing disease through this source to Canadian livestock.

Vacation At Home

While many Canadian farms are located near natural bodies of water the majority has no place where children can enjoy a refreshing swim or the farmer can cast a line for a mess of fish.

Such a situation need not be permanent, contends G. R. Snyder of C-I-L's agricultural chemicals department. With a little effort and time a farm pond could be established which will provide a holiday environment for the whole family all year round—fishing and swimming during the summer and skating in the winter.

The most economical method of building a farm pond is by damming natural drainage with an earthen dam at a point that will impound the largest area of water for the cost involved. At least one third of the total area of the pond should be six or more feet deep, so good fishing conditions may prevail, Mr. Snyder suggests. In area, one-fourth of an acre should be the minimum for sustained fish production. The pond must be underlaid with clay or other soil which is almost impervious to water.

Contrary to common belief, a fish pond does not have to have a stream of water running through it. The ideal pond for fish production is one which has just enough water draining into it to replace losses from evaporation and seepage and a normal annual rainfall is usually sufficient to accomplish this.

To save time and labour costs, the core of the pond may be blown with ordinary ditching dynamite available anywhere in Canada. Soil-moving machinery will do the rest. Costs could be kept down to \$200.

A newly-built pond should be fertilized as soon as it is filled with water. This is essential to prevent weeds from establishing themselves and to encourage the growth of plankton—the natural food for fish.

Dairy Products a Bargain

The average Canadian worker can purchase substantially more milk and butter for each hour's earnings today than he could in 1939. In the case of milk he can buy over six quarts as against 3.85 quarts in pre-war and in the case of butter over 2 pounds as compared with less than 1½ pounds.

Plan For Outdoor Living In Summer

LIKE living out-of-doors? Plan an "outdoor living area" for this summer. Here are a few tips to make the area liveable: The area needs to be enclosed from view of passing public or nearby neighbors. Shrub borders and trees will give privacy if properly grouped. Where the area is small, a fence can be used to save space. Screen off work areas such as the clothes line, wood piles, and chicken houses. Without privacy, it isn't much fun to eat, sunbath, or sit outdoors.

Furniture in the outdoor living area gives a liveable touch. Without the furniture the area is not complete.

The area should be planned so that the plant material is varied, and there is interest during the various seasons of the year. This is especially true if the living area is visible from the rooms of the house. In the winter, select shrubs and trees with colorful bark, evergreen foliage or colorful fruit. During the rest of the year vary the selection of flowers, shrubs and trees to create interest throughout the various periods.

"Control" of weather in the living area helps extend the length of time it can be used. Shade trees are needed to screen the sitting area from the hot sun. Wind-breaks often will cut down some of the wind in the fall. Garden pools help give a cooling effect in the summer.

Many factors determine the location of the living area. When it can be arranged, locate it where there is a good relationship between the living room of the house and the outdoor living room. In some houses where there is a side porch, it is often logical to develop the living area off of this porch. If there is a large shade tree in a yard, it often can be used as the central portion of the outdoor living area. Under the shade tree is a grand place to set garden furniture.

All kinds of breads freeze or refrigerate satisfactorily. Wrap each sandwich separately so that flavors won't mingle.

Another New Sire At Macdonald



The sire is more than half the herd when we are thinking of herd improvement.

There are two ways in which a herd may be improved. The first method is by culling the inferior females. The second way is through the wise selection of sires. Studies of dairy and beef herds confirm the belief that the sire usually provides well over seventy-five percent of the improvement obtained.

Black Barbarian of Kingshaven is the new Aberdeen-Angus Sire at Macdonald. As a two year old, his size and appearance backed by an excellent pedigree indicating superior type suggests that he should be a valuable addition to the College herd.

The Canadian Dairy Industry . . .

Has 455,000 Dairy Farms.

Has 2,908,000 Dairy Cows.

Produces over 1.5 billion gallons of milk annually.

Ranks 3rd as a source of Farm Cash Income with a value of \$375,000,000 annually.

Has 1,905 Dairy Factories which manufacture 258 million pounds of creamery butter, 85 million pounds of cheddar cheese, 39 million pounds of process cheese, 25.5 million gallons of ice cream, 342 million pounds of concentrated whole milk products and 92.5 million pounds of concentrated milk by-products.

Has many hundreds of Milk Plants which process and distribute the nearly 1.4 billion quarts of fluid market milk consumed each year.

More than 2 million Canadian or about 1 out of every 6 of our population depend on dairying for all or part of their income.

The raw green leaves of cabbage are an excellent source of vitamin A and vitamin C, and also contain good amounts of vitamin B₁.

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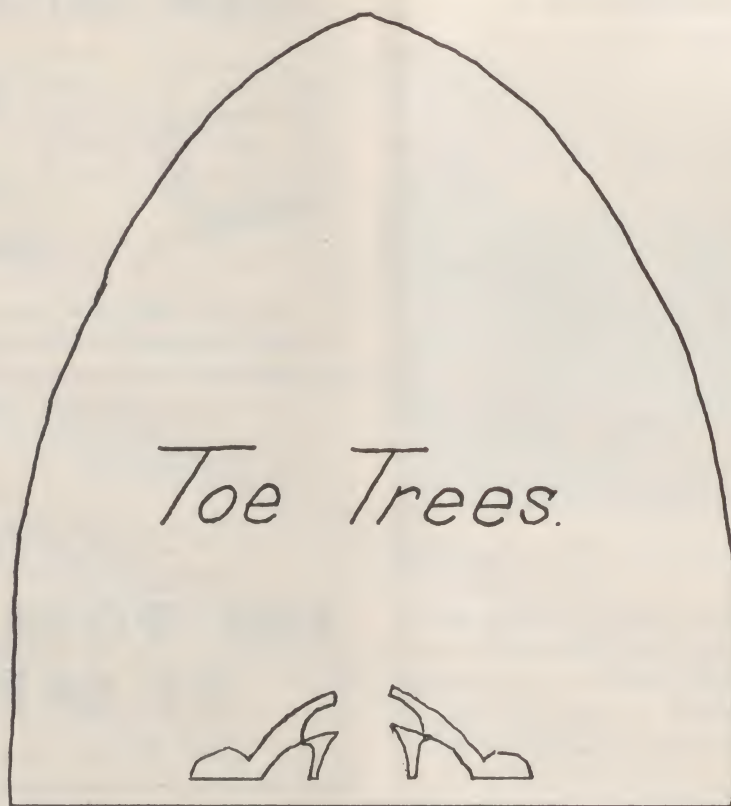
By Ed Nofziger



Forest Service, U. S. Department of Agriculture

"Let's hope there's a natural explanation and it's not really Paul Bunyan—he didn't exactly practice good forestry!"

For The Ladies



Pattern for Toe Trees

Toe trees are little heart-shaped pads to insert in the toes of slippers and fine shoes. Force them gently but firmly into the toe of the shoe; mould the vamp over and around them. They take the exact shape of the shoe, regardless of size or style. Slip them into place as the shoe is removed. They coax the leather into its original form, maintain a crisp, neat, new look and add months of wear. No danger of toe trees stretching the leather as spring-shank trees may! Make one for every slipper you have; the cost is little, the construction is quick and simple. For 4 pairs buy:

- 1/4 yard leaf green velveteen
- 2 2/3 yards shell pink rayon corde or cording
- 1 spool leaf green mercerized cotton thread
- 1 spool shell pink silk thread.

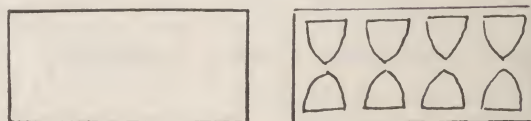
The material for padding can be cotton batting, cotton waste, wool, bran, or scraps of discarded cloth cut fine.

To Make The Trees

The pattern given above has no seam allowance. The lines are the actual stitching lines. Trace this pattern on light-weight cardboard and cut out.

Cut the velveteen in half through the center fold. Turn one half wrong side up, and with a pencil, trace outlines

as illustrated in the diagram below.



Fabric Cut and Marked.

Lay this half over the other, right sides of fabric inside, and selvages even. Pin each tree section to the velveteen underneath. Cut around all sections, one-quarter inch outside the pencil line. This quarter inch is the seam allowance (Figure A).



Figure A.

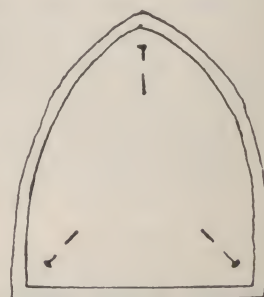


Figure B.

Machine stitch on the pencilled lines, leaving 2 inches free at the top (Figure B).

Turn right side out and stuff. Force the wadding in firmly, because the trees soften in use. Now turn in the seam allowance of the opening and whip the edges together.

At one corner of the top, fasten securely a very strong thread, linen or Number 40 cotton doubled. Run quarter inch stitches through the top seam (Figure C). Pull the thread as tightly as possible and fasten this end securely. The tree has now taken on its heart shape.

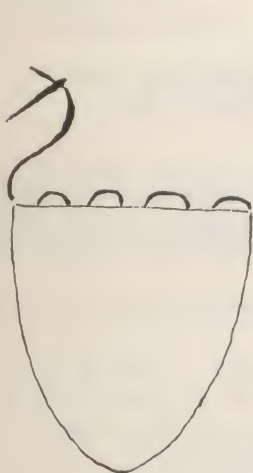


Figure C.

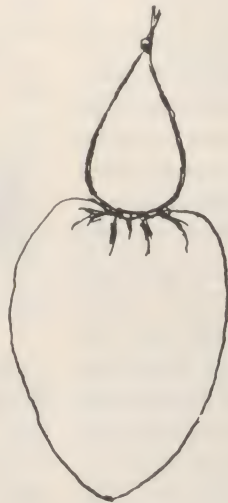


Figure D.

Cut the rayon cording into 12 inch lengths. Whip the center of the length along the curved top seam. Tie the ends in a knot. Use the ties to pull the trees from the shoes, or to hang over a hook when not in use.

Blossoms on the Trees

For dainty and most acceptable gifts, for bazaars, or for your own pleasure, do paint this delphinium design. It is fun and so easy.

You will need:

Oil paints (Student colours are inexpensive but satisfactory).

1 tube each of green, white, blue and red. Yellow and purple add to the picture but are not absolutely necessary.

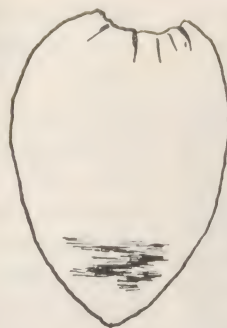
1 paint brush, rather small.

Turpentine.

Tooth picks.

Around the rim of a white plate squeeze little mounds of each colour. Paint the background with the brush. Thin a bit of the green with turpentine and brush across the bottom of the tree. Add a tint of yellow to the green and stroke in some highlights. Now add blue and make the shadows.

Dry the brush. Pick up green on the very tip, (no turpentine is used here) and outline two or three gracefully curving stems.

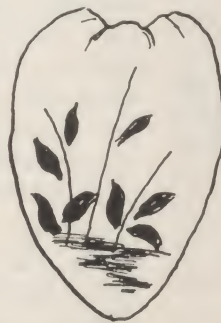


The Background.



Stems are Added.

Using the same technique as the background, brush in leaves, a few at the tip of the stems, many at the bottom. Vary the shades by adding yellow or blue to the green. They may not look like real delphinium leaves, but we defy any botanist to criticize!



Leaves brushed on the stems.



Delphinium design.

Now take a toothpick. On the wide end, pick up a bit of white paint, then a bit of red. Press the paint-laden tip into the velveteen near the top of a stem. The colours blend in tints of rose and pink, and the blob of paint shapes itself into a tiny blossom. Continue down the stem, scattering the flowers at the top, massing them near the bottom. Keep the top buds pale by using much white, the lower ones deep by more of the colour. One spray may be pink, one blue, another violet. This paint is thick. Allow it to dry for two days before slipping the dainty little trees into your slippers.

When cooking cabbage, remember to use only a little water and to cook only for a very short time so no more food value will be lost than is absolutely necessary — for instance, vitamin C is lost quickly during cooking.

* * *

Cabbage should be washed thoroughly before use, and used as soon as the head is opened or cut.

Strippings

by Gordon W. Geddes

When it was too late to be really effective, I thought of how to get some cold weather for sugaring. We didn't get any good of it ourselves but at least one of the neighbours made enough to bring him a hundred dollars. Of course it was poor quality as it was muddy but it sold. What brought on the cold wave was ordering the metal to finish one half of our barn roof. We started late last fall and rather dismantled our lightning rods and needed to finish that half before we could properly replace them. All spring we were thinking about the early thunderstorm last spring which burnt our neighbour's barn. The weather was so bad that it was three weeks after our metal arrived before we got it on and the lightning rods back in shape. But there weren't any thunderstorms all the time. If and when we cover the other half, we don't need to interrupt our protection again. However the price of cattle and the price of metal

are so far apart that I do not know when we will finish.

Omer wasn't with us to finish either the sugaring or the roof but we hired a part time man a few days later. After two weeks of part time work we hired him for full time so we now have a married man to live in the other house again. He is Rosaire Richard and both he and his wife are well acquainted here as she was born only two miles away.

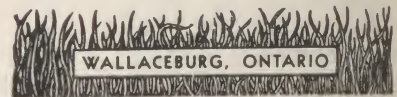
Improved pastures started off earlier this year than it did last year. We had the cattle out first on May 7th and the heifers went out to stay on May 10th. Last year it was the 12th when they went out first and came right back in a cold rain. It was the 15th before they went out again and the 19th before we left the heifers out. And there was more feed this year than there was when they went out last year. In fact the fall rye was too far along when they did go out. That is sometimes the trouble as it gets ready before it is warm enough to turn the cattle out. We ran an electric fence so the cattle are pretty well confined to it but what was sown the earliest last fall got so far along that they do not touch it. The later it is sown the slower it comes on in the spring so it might be more effective for spring pasture if it is not sown too early. We tried again to put the grass and clover seed on this spring and get it back into pasture without any more work. The

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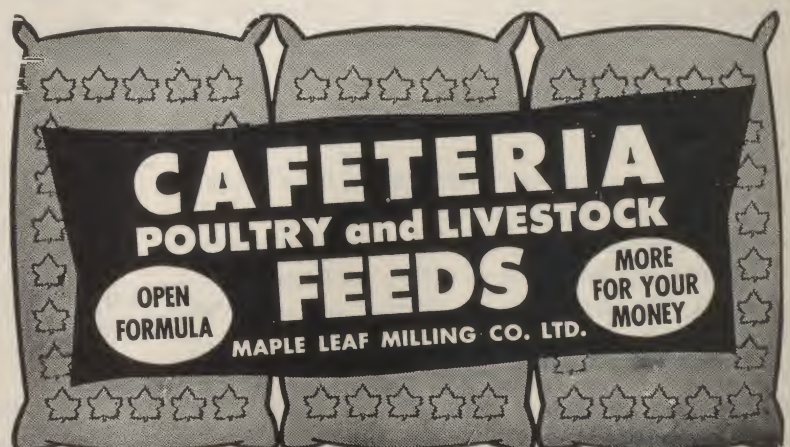


roofing job kept us from getting the spring coat of fertilizer on but perhaps we can get a chance later.

While it is late to have no grain sown, it is still too early to make comparisons with last year on that score. It seems doubtful if we shall have any grain sowed as early as last year but there is still hope of finishing earlier if the weather would change. Last year it was not only a late start but it took a long time to finish. Our Vanguard oats, sowed late last year, cleaned out a high percentage of seed this year so we didn't have as much hauling to do there. We are planning a little extra acre-



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age in grain to cut down on surplus hay this year but I guess some of it will be Montcalm barley.

Speaking of hauling, if anyone here cuts down the old pine tree and hauls it away to the mill, it will be a lot further than it used to be. We haven't any old pine to cut but we hauled some elm and hemlock with the tractor. It is not far when the roads are good but they were far from it when we hauled. Most of the time we were loaded both ways as we brought back a lot of sawdust for bedding as well as our lumber. At the finish when we might have gone down empty we hauled for a neighbour. On the day that I thought I was in the biggest hurry, I blew out a tire on the wagon which slowed me quite a bit though fortunately I was almost at a garage when it blew. And then it rained so I wasn't in such a rush as I thought since we didn't use the lumber for a week.

A couple of Americans came along supposed to be buying cows. They wouldn't buy any but we gave them a pair, mostly because we usually do send some down that way in the spring. Maybe the fact that I had been milking so late alone for some weeks helped to influence me some too. However we are not in too much of a hurry to see them go as, if one of them calves here, the calf is ours. We haven't a heifer calf yet this year but after all the talking we did about the calf, it will surely be a bull if it does arrive here.

After nine years of service to the district, the operator in our artificial breeding club, Fritz Pope, is leaving us. Fritz took on the job with very little training but made a very good job of it and has quite a knowledge of the work which he is quite willing to try to pass on to a successor if need

Among the first signs of abnormal eye conditions may be itching of the lids, styes, redness of the lids or eyes, burning of the eyeball or light-sensitiveness. Headaches, dizziness and even disturbed stomachs may be traced to eyestrain.

How Bossy Spends Her Day

How does old bossy spend her time? What does she do to while away those lovely summer days in her lush, green pasture?

June is dairy month — an opportune time to delve into the private life of a cow. The actual dairy-keeping was done at Cornell University — but the study should hold for all cows. Here is what the experimenters found.

Bossy grazes only $7\frac{1}{2}$ hours each day regardless of how much feed she gets — 60 percent during daylight hours and 40 percent at night. She spends 5 hours eating at the rate of from 50 to 70 bites per minute. She chews her cud 7 hours a day and spends 12 hours — at nine different times — lying down. While grazing she travels $2\frac{1}{2}$ miles in the daytime and $1\frac{1}{2}$ miles at night. She drinks 10 times per day.

The cows under observation could eat 125 pounds daily of 5-inch-high Kentucky bluegrass-white clover forage, sufficient to produce 30 pounds of 3.5 percent milk. Where the grass was 2 to 3 inches high, the cows were able to graze only 90 pounds of green forage per day. And where the grass was very short, bossy got only 45 pounds per day.

Regardless of the amount of forage the cows got, there was little difference in the amount of time spent grazing. If a cow is chewing her cud while lying down, it does not necessarily follow that her appetite is satisfied.

The moral — bossy will be satisfied with what she can get in $7\frac{1}{2}$ hours of grazing, whether she eats 40 pounds or 125 pounds.

Nobody Can Argue Against Grass Silage

"I don't know exactly how much grain we are saving since I haven't all figures readily available but I do know that we are feeding less grain and hay, and getting just as much milk since we started to feed grass silage to the milking herd," Alex

Lamond, Farm Manager at Lindwood Farms, Middle Sackville, told the students from the Nova Scotia Agricultural College who, in company with Dave Adams, Animal Husbandman, visited the farm recently. "And," continued Mr. Lamond, "what is equally important, I believe, is that the herd is in good condition physically and this fact I attribute, in part, at least, to the feeding of grass silage."

Mr. Lamond is no stranger to grass silage for he was feeding this at Fairmeade, out in B.C., several years ago—and he has been an enthusiast of grass silage ever since. Alex, for instance, believes that nobody can argue against grass silage if a good product is put up.

It was only natural, therefore, that soon after his arrival at Lindwood, a 16' silo, capable of holding about 125 tons, was constructed. About a hundred tons of clover was stored in this silo last summer. Molasses was used as a preservative; and although it is recognized that good silage can be put up without any preservative, Mr. Lamond felt that the use of the molasses might make a "good product better." And he has a good product. Of that there is no doubt.

Since plants require a balanced food supply, high nitrogen without adequate potash and phosphoric acid favors soft growth which causes plants to lodge (fall over easily). In the case of fruits and vegetables, slow ripening and poor-keeping qualities are common results.

When extra nitrogen is being applied during the growing season and any doubt exists as to the adequacy of the mineral plant food in the soil, needs of a crop can be safeguarded by using a complete fertilizer such as 10-10-10 (Triple-Ten) on medium to light soils and 10-6-4 on medium heavy to heavy soils. The recommended application for average fertility conditions is 300 pounds per acre.



DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Hog Cholera

The first symptom of cholera usually noticed in a herd of swine is a loss of appetite in one or two animals, characterized by refusal to come to feed or a turning away after brief nibbling. There are signs of weakness, especially in the hind legs, with a peculiar, wobbling, scissor-like gait. Also characteristic is a rapid rise of temperature with signs of thirst. Often a thick, gummy secretion from the eyes may glue the eyelids shut. A pig suffering with cholera usually assumes a listless, dejected posture with head drooping downward and the tail hanging limp. The skin of the undersurface of the body and behind the ears frequently becomes bright red, later dark purplish, at the advanced stage.

The incubation period of the disease varies from a minimum of three or four days after exposure to the virus up to one or two weeks where there has been less direct contact. Sick pigs usually die within seven or ten days and contagion progresses rapidly through the entire herd if allowed to go unchecked.

Methods of Infection

While contact with infected animals is the primary means by which the disease is spread, it is likely that it may be transferred by other carriers such as birds, flies, small animals, humans, etc. Meat scraps from cholera-infected hogs contained in garbage may also be a direct

source of infection. In cold weather the virus will remain active in carcasses of cholera-infected pigs for several months, but in hot weather its active life is much shorter once it leaves the body of the victim. Dead animals should be promptly buried deep under quicklime or burned.

Prevention

Good swine management, proper feeding and sanitation is the first essential for resisting hog cholera or any other disease.

Research work begun at Ames, Iowa in 1903 resulted in the successful development of a protective serum by 1907. Since that time the practice of administering anti-cholera inoculations to small pigs at weaning time has been widely adopted by U.S. commercial hog raisers. The serum injected by itself gives only temporary immunity, lasting a few weeks. A more complete, lasting immunity may be obtained, however, by administering serum in conjunction with a small amount of virus or virulent blood. This process is known as simultaneous inoculation or serum-virus immunization. In recent years a new type of crystal-violet vaccine developed by the U.S. Bureau of Animal Industry has shown promise, giving a reasonably good period of immunity without some of the possible disadvantages in using the active-virus type. It is not, however, adequate protection for garbage-fed hogs.

Veterinarians Graduate

The Veterinary School at St. Hyacinthe held its graduation exercises in May, at which eighteen diplomas in veterinary medicine were distributed to students of the graduating class.

The Rector of the University of Montreal, Mgr. Olivier Maurault, presided and the candidates were presented by Dr. St. Georges, M. V. Mgr. L. Beauregard, Superior of the Seminary, E. J. Chartier, m.p.p. Mayor Ernest Dufresne and the staff of the School were among the platform guests.

It was announced that the new buildings of the School, now being constructed, will be officially opened next September, and will be ready for next session's classes.

Agricultural Show Will Repeat

Encouraged by the phenomenal success of the first Salon of Agriculture, the organizing committee has announced that a second show will be held from January 29 to February 7, 1954 in Montreal. The second show will last three days longer than last winter's, in order to make it possible for everybody who wants to see the show to get in, and will be held once again in the Show Mart building at Ontario and Berri Streets.

Prof. Gustave Toupin is the president and the general manager is Gabriel Renaud.

Ayrshire Field Day July 23

The Quebec Ayrshire Club will hold its Provincial Field Day at the St. Hyacinthe Dairy School on July 23rd, and a good attendance of Ayrshire breeders and their friends is hoped for. Provincial elimination judging contest will be a feature of the day's activities.

Grants For Limestone Use

Purchasers of ground limestone for the correction of acidity in their soil may once again apply to the Department of Agriculture for assistance in financing their purchases. The conditions under which the grants will be made are as follows:

General Conditions: Crushed limestone must contain a minimum of 85% calcium carbonate (CaCO_3) and/or magnesium (MgCO_3) pulverized to a fineness that all the material will pass through a 10 mesh to the inch screen, and 30% will pass through a 50-mesh screen. Selling price, not including packing and hauling charges, must not be more than \$3 per ton for crushed limestone.

Railway Transportation:

Shipments must be by complete carloads of 30 tons or more, and be accompanied by a delivery permit for each complete carload, in conformity with the reduced tariff granted by the railway companies to farmers for transportation of calcareous amendments.

The delivery permit is issued by the Department and is given, in duplicate, to the purchaser by the local agronomer. One copy is sent to the seller with the order; the other is kept by the purchaser.

The Department of Agriculture will pay:

- a) a grant equal to the transportation charges, according to the reduced tariff, up to a total of \$2.00 per ton;
- b) an additional grant equal to half the excess, if transportation charges exceed \$2.00 per ton;

To simplify matters, the seller will pay the total transportation charges, according to the reduced tariff, and will make a claim for the amount of the grant payable by the Department.

Claims must be filed with the Head of the Field Husbandry Branch, Department of Agriculture, Quebec, and must be accompanied by the following documents:

- a) a copy of the invoice sent to the purchaser on which should appear:

The number of tons in the shipment;
the selling price per ton;
the cost of transportation;
the amount of Government grant;
the difference in transportation cost to be paid by the purchaser;
the car number;
the permit number.

- b) the bill of lading of the transportation company showing, in addition to the usual items, the weight of the goods verified by the company. This verification is not necessary in cases where an agreement exists between the shipper and the Canadian Freight Association with regard to uniform weights of sacks.

Highway Transportation:

In this case, the department will pay, from the quarry to the farm, a grant of 0.10 per ton for each of the first

10 miles and 0.05 per ton for each of the following 20 miles up to a maximum of \$2.00 per ton.

The claim must be made in duplicate on an official form obtained from the local agronomer and should be filed with the Head of the Field Husbandry Branch, Department of Agriculture, Quebec, after being verified and signed by the agronomer of the farmer's district.

The claim must be accompanied by the original invoice issued by the seller on forms supplied by the Department of Agriculture. These invoices must indicate as separate items, the number of tons delivered, the selling price per ton and the name and address of the purchasing farmer. The invoice must be signed by the purchaser.

For remote districts where the transportation of lime has to be made by rail from the quarry to the station and thence by truck from the station to the farm, the Department of Agriculture will pay starting from the 6th mile a grant of 0.10 per ton for each of the 10 following miles and 0.05 per ton for each of the 20 additional miles. This grant cannot exceed \$2.00 per ton. On the claim, in the column "bought from" should appear the number of the delivery permit that has been used for transportation by railroad.

As this is a joint policy with the Federal Department of Agriculture, this regulation will be in effect from April 1st, 1953 to March 31st, 1954.

During 1952, Quebec farmers applied 196,676 tons of limestone to their fields.

Audits Important

by L. Harman

The other evening at a co-op annual meeting I heard some concern expressed over the cost of auditing. Certainly this is a problem for annual meetings, but maybe cost is the second problem on auditing; and the first problem is getting the job done and getting it done well.

Certainly a lot of groups have had their troubles where auditors didn't give them a proper moving picture on their results or didn't help them plan the special aspects of accounting or taxation that relate to co-ops.

Something like my experience in the watch business. I carried my grandmother's watch until it wore out. Then I went into the dollar watch business. Dollar watches for three or four dollars, you know. Recently I had a big deal. Traded off a watch that wasn't very good for one that wasn't much better. Now I'm out of time altogether. I get off the track on when to go to bed and when to get up. Afraid I'll miss the boat or miss the train or something one of these days.

Guess I'll just have to buy a watch that works; and if I do that I'll have to pay for it.

—Rural Co-operator.

National Barley Contest For 1953

The Barley Improvement Institute continues again this year to sponsor the National Barley contest, which will operate along the same lines as last year. All the fields entered in the contest will be inspected during the summer, cleaning of the grain for judging must be completed by the first of November, and at least a 40-bushel sample must be available for sampling and judging.

The seven regional prizes will be awarded in December and the provincial championships will be decided some time later. June first was the last date for entry.

Ayrshire Sale of Calves

Cattle sales these days have a tendency to drag, and the potential buyers who came out to the Quebec Ayrshire Club's spring sale of calves didn't break any records for brisk bidding. There was a good crowd around the sale ring at the St. Hyacinthe Fair Grounds on May 22nd, but bidding was slow, though prices were good for present conditions, averaging \$108.50 for 36 head. The sale was well organized; the catalogue gave all the information on pedigrees that could be desired, and Secretary Boulais was on hand to supply supplementary information and to encourage the bidders when the sale showed a tendency to slow up.



The calves, all heifers, were from accredited herds from the St. Hyacinthe, St. John, Howick and Eastern Townships area farms, consignors being Ferme des Trois Ruisseaux, Frelighsburg, J. G. Wilson, Lacolle, St. Hyacinthe Dairy School, Elphege Lagace, Jules Lagace, J. P. Lagace, George E. Morin, all from St. Hyacinthe, the Oblate Fathers at Rougemont, Clement Beauchemin, Vercheres, Joseph Boulay, St. Thomas d'Aquin, Sally Wilson, Lacolle, P. D. McArthur, Howick, Roger Arpin, St. Ours, Gerard Bonin, St. Bernard, Wilfrid Milette, St. Ours, J. Provost, Boucherville, Mrs. A. M. Skinner, Senneville, Roland Pigeon, Vercheres, Ernest Bourgeois, St. Ours and Antonio Vermeersch, St. Hyacinthe.

Book Review

A FARM DICTIONARY: Compiled by D. H. Chapman, illustrated by Evelyn Dunbar. 209 pages. Evans Bros. Ltd., London. Distributed in Canada by British Book Service, Toronto. Price 2 shillings.

This book is published in association with the National Federation of Young Farmers' Clubs (of Britain), and printed by the Camelot Press.

The dust cover, pleasingly decorated by silhouette repetition pictures of farm animals and implements, states that the "compiler" is at the College of Estate Management and lives at Wye, in Kent, and has, among other activities, written books for young children. A full page advertisement following page 209 informs us that Evans Brothers have published 27 Young Farmers' Club booklets on nearly everything or activity in farming. The combination is inspiring.

It is immediately evident, on reaching the definition of, say, "buttock"—"one of the two cheeks (humps or humps) of the posteriors (bottoms or rumps)" that we must join the medley of perennially youthful people and read a dictionary for the fun of it. Only a few of the definitions are, however, so whimsical; all are clear and unambiguous; there is no phonetics or etymology to worry the seeker after knowledge; there are many cross—and back-references; and all is written in direct English. Here are three examples:

Adulterate—to make a thing false by adding less good materials, such as to water down milk before selling it as straight from the cow.

Analyse—to split a thing up into its different parts to find out what it is made of.

Martingale—a leather strap joining the nose-band of the girth-strap of a horse, so that it cannot rear or fling its head about, any more than a man could who pinned the end of his tie to his trouser-belt.

Almost every technical word, we would say, in ordinary use around the (British) farm and the names of many breeds of livestock and their disorders will be found in this dictionary. The drawings are quite adequate, with or without the touches of humour. A lepidopterist will be puzzled to identify the species of *geometer* moth by the drawing, and an error is visible in the picture of the *tedder*. A slightly incorrect definition is given for yeast (yeasts are the microorganisms that make ale). Mites, it should be noted, irritate cheese as well as birds; spent matches are much relished by pigs; a pea-cock is (or might be) only a cock of drying pea plants, not being mentioned as fancy poultry; a duck is a Miss or Mrs. Drake. We are not, however, given a definition of a "yokel"; the Dictionary will thus eminently appeal to progressive young farmers. Anyone's time is well-spent in just browsing through it.

Portneuf Farmers on Their Toes

Farmers of Portneuf county are hastening to enroll in the various competitions on farm improvement which have been organized by their agricultural societies with the help of the Extension Service of the Department of Agriculture, and by the end of May 125 applications had been received, with more in prospect.

The competitions were organized in the hope of encouraging basic improvements in farming practices and include soil drainage, the bringing of new land into production, better care and management of pastures and the building of silos.

The two agricultural societies at Pont Rouge and at Grondines, are sponsoring the competitions and have put aside \$1800 each to provide prizes to be distributed as follows:

- (a) \$20 (up to a total of \$200) for every silo built.
- (b) \$3 per acre (but not more than \$12 to any one farmer) to any farmer who establishes a Ladino pasture and put it into a rotation
- (c) a number of other prizes of \$10 each for drainage work, for which anyone earning 60% of the total number of points when his work is judged is eligible.
- (c) the work of bringing new land into cultivation is in collaboration with the Department of Agriculture, and a premium of \$10 for every acre brought under the plow is paid, up to a maximum of \$30 for each individual.

Book Review

SOIL CHEMISTRY: by M. Y. Shawarbi. Chapman and Hall, Ltd. Distributed in Canada by British Book Service, Toronto. \$6.50.

This book deals with major chemical, physical and physio-chemical characteristics of soils. A considerable section is devoted to soil classification and the general characteristics of three great categories of soils (a) well-drained soils of humid regions, (b) well-drained soils of arid to sub-humid areas, (c) soils of imperfect to poor drainage. It is, on the one hand, too technical for the general reader and, on the other, inadequate for the more advanced student of soils. In the opinion of the reviewer it is not as suitable as a text for an undergraduate course in soils as are a number of others written by authors more familiar with conditions in North America.

Aids In Fighting Soil Erosion

Soil erosion can be cured through the use of grasses and legumes. In addition to protecting the soil from natural forces such as wind and rain, they have the power of restoring a desirable crumb-like structure which improves drainage, makes the soil less subject to the forces of erosion, provides for the movement of air and makes the soil easier to work.

Ohio soil conservationists have found out that legumes are more valuable than grasses as feed crops, and in

Harvest Berries Carefully

With the approach of harvest time for strawberries, raspberries and other tender fruits, growers should plan on "top quality" berries for the fresh or processed fruit markets, states C. A. Eaves, Senior Horticulturist, Cold Storage and Plant Nutrition, Experimental Station, Kentville, N.S.

The golden rule is that the berries should be firm-ripe and free from skin breaks. Soft, over-ripe fruit is frequently injured either by the heavy fingered picker who tries to hold too many berries in his hand or by crushing the top layers in over-filled boxes. Such injuries lead to wet juicy berries which at field temperatures (70 degrees-80 degrees F.) become susceptible to rapid mould development throughout the box. Good firm berries are a 'must' and these may be obtained during picking by placing the culls in a separate box.

The practice of placing full boxes in the shade of the plants should be avoided as much as possible in favour of immediate removal to a well-ventilated shed where the temperature of the fruit can be reduced. Alternatively the fruit can be washed in ice water to effect rapid cooling but soft or over-ripe specimens should first be removed. Some growers may be fortunate enough to have refrigerated storage space near at hand, in which case the fruit should be immediately cooled to below 40 degrees F. with the aid of fans and kept cool in order to prevent "sweating".

addition they add nitrogen to the soil. Grasses do, however, add large quantities of valuable organic matter to the soil in their underground parts. Whereas alfalfa will make about 3000 pounds of roots per acre, oats 600 pounds of roots per acre, and soybeans even less, a good grass will make from 4000 pounds to more than 7000 pounds of roots per acre.

Hay grasses like timothy and brome will add root material to the soil faster than bluegrass and their roots go deeper. Grass roots also have another advantage over legumes, for their roots do not decay as readily as do legume roots in the soil, which is an advantage for erosion control.



384 Vitre St. West
MONTREAL, QUE.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Canada Day Program

Highlight at World Conference of Rural Women

WHEN the Associated Country Women of the World meet in Toronto next summer, one of the big events will be the Canada Day program, to be held in Maple Leaf Gardens on Friday, August 21st. And the climax of Canada Day is to be a musical cavalcade of the story of Canada and the Canadian people—"Dominion of Destiny"—presented by the Federated Women's Institutes of Canada.

Over 11,000 rural women from all parts of Canada and the United States will pour into Toronto by train and plane, by bus and private car, to attend the Canada Day ceremonies. For this will be the one day on which the general membership of the Women's Institutes, Homemakers' Clubs, Cercles de Fermières, Home Bureau and similar groups get a chance to attend this great world gathering of rural women from all parts of the globe.

On the other days of the conference, from August 12-23, the sessions at the Royal York Hotel must of necessity be limited to the official delegates, corresponding members and accredited observers (official visitors) from 25 countries, a total of about 1,000 persons. On Canada Day, in the large arena, over 12,000 may attend.

The plans for Canada Day were announced recently by Mrs. Hugh Summers, president of the Federated Women's Institutes of Canada, at the conclusion of a three-day meeting at the Royal York Hotel of the FWIC Main Planning Committee for the ACWW Conference.

It is expected that the day's ceremonies will be officially opened by the Rt. Hon. Louis St. Laurent, Prime Minister of Canada.

Then, women delegates, many of them wearing their native costumes, will bring greetings from every country represented at the conference. There will be an address by Mrs. Raymond Sayre, president of the ACWW and music will be provided by the Junior Farmers' Choir of Ontario.

The dramatic conclusion to the day's program will be "Dominion of Destiny"—a fast-moving, elaborately costumed review of the exciting and colourful story of Canada and the people who have pioneered, explored and developed this country from the days of the Indians to the atomic age.

This will be a spectacle on a large scale, designed for presentation in an arena theatre—employing a specially



Some of the members of the Main Planning Committee for the Conference of the Associated Country Women of the World, to be held in Toronto, August 12-23. The picture was taken at a recent meeting of that committee and shows, left to right: Mrs. J. R. Fitcher, St. Thomas, Ont., chairman program sub-committee; Mrs. Hugh Summers, Fonthill, Ont., president of the Federated Women's Institutes of Canada and chairman of the main committee; and Mme J. B. Cadrin, St. Anselme, Que., president of Les Cercles des Fermières, who are co-hostesses with the F.W.I.C. for this international gathering, meeting for the first time in Canada.

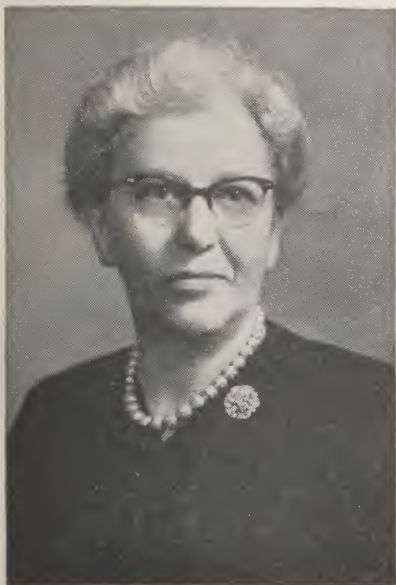
designed stage and making use of the floor of the arena itself.

The production will take the form of a continuous—action cavalcade, combining the services of a full concert orchestra, a chorus of mixed voices, corps de ballet, soloists, a large cast of actors, units of the armed services, members of the Royal Canadian Mounted Police, together with various animals and vehicles and other special features.

This pageant of the Canadian Story is being produced for the FWIC by Fonger Studios. Production will be under the direct supervision of O.W. Fonger and Larry McCance, with music directed by Samuel Hersenhoren and choreography by Boris Volkoff. The singing star of the show is to be Ernest Adams.

The performance of the pageant will be repeated the following day, Aug. 22, when it will be open to the general public.

President A.C.C.W.



Mrs. Raymond Sayre, Ackworth, Iowa, President of the Associated Country Women of the World.

Mrs. Sayre was born at Indianola, Iowa and graduated from Simpson College with an A.B. degree in 1917. A year later she married a farmer and now lives on a 600 acre farm at Ackworth, Iowa. She has four children.

Mrs. Sayre has had an active outstanding career in many fields of service. She has served in various capacities on national and international organizations and at present, in addition to her leadership of the ACWW, to which position she was elected at the Amsterdam Conference in 1947, she is a member of the Standing Rural Welfare Advisory Committee of F.A.O., member of National Commission on UNESCO, member of ECA Women's Advisory Committee, and member of a long list of American organizations too numerous to record here.

Mrs. Sayre attended a meeting of non-Governmental Organizations in Geneva in 1948 and the FAO Conference in Washington in 1949. That same year she visited Germany at the invitation of the Military Government to survey the nature and development of rural women's organizations there. In addition, her duties in connection with the ACWW have taken her around the world once, (1951), and through Africa and India last fall, with stops in Lebanon and England on her way back.

In 1942 she received an Honorary Degree of LL.D. from Simpson College and in 1952 an Honorary Degree of Ph.D. from Iowa State College. Mrs. Sayre won the Freedom Award in 1952 for an article in the Farm Journal.

The Month With The W.I.

Still making scrapbooks! Such a surprising response to this suggested project, interesting souvenirs for overseas delegates coming to the ACWW Conference. Last month we said about 300, this month add another 100 to that total.

You will note the occasional reference to knitted squares, showing branches are still carrying on with this project. Here is an extract from a letter just received from Miss Jean Bovey, president of the Women's Voluntary

Services: "The W.I.'s all across Canada have done nobly in our collection of knitted squares, wool clothes and old sheets for Korea. Quebec ranks first with New Brunswick a close second".

Argenteuil: *Arundel* enjoyed two films, "Across Canada" and "Canadian Heritage", shown by Mrs. M. Graham. At Brownsburg Mr. K. Russell was guest speaker, his topic "The Value of Dairy Products". A paper on "Holland Tulips" was read by Mrs. H. Zimmer. Members are doing Red Cross sewing, knitting and quilting, and presented a new Union Jack to the school in observance of Citizenship Day. A donation of \$5 was given for prizes at the Lachute Fair. *Frontier* had a dialogue dealing with Publicity, prepared by the convenor, Mrs. Graham, *Jerusalem-Bethany* had a demonstration on supper dishes given by Miss Janet McOuat. A crib quilt was made for the Red Cross and \$15 voted to the Cancer Fund. *Lachute* reports a visit to Ayers Ltd. and to a rope factory. *Pioneer* heard two papers read by Mrs. J. McKenzie, "Milestones in the Life of Queen Mary", and "How to Become a Canadian Citizen". *Upper Lachute* & *East End* had as guest speaker, Mr. Ogilvy, florist, who gave a talk on "Bulbs", followed by a discussion.

Bonaventure: *Black Cape* heard two papers, "The Life of Queen Mary" and "Publicity Review and Plans for the Future". *Marcel* held a busy meeting when literature from the Cancer Society was discussed. *New Richmond* heard a talk on "Planting and Care of Strawberries", given by Mr. J. Alain, agronome. A garden party was held and \$42 added to the funds. *Port Daniel* is continuing to make and send quilts to Korea. Money was donated to Flood Relief, and to the community Coronation celebration. *Restigouche* is planning for the school fair and seeds were ordered by the convenor of Agriculture, Mrs. L. Beaulieu. The convenor of Education presented a book, "Quick Canadian Facts", to the school. *Port Daniel-Shigawake* J.W.I. held their annual meeting. Five members received their sweaters and two their pins. Articles for a Coronation scrapbook were assembled. The feature article for the county W.I. monthly broadcast was prepared by the county president, Mrs. H. Ward, New Carlisle.

Brome: *Abercorn* heard a paper, "Gardens and Flowers", read by Mrs. Gibney, convenor of Agriculture, who also gave instructions for making "bottled" gardens. The sum of \$5 was voted to the Red Cross. *Knowlton's Landing* had a visit from the county president, Mrs. W. Westover and the county secretary, Mrs. S. Cowan. *South Bolton* was also visited by Mrs. Westover and Mrs. Cowan. This branch won second place in the quilt section of the provincial Tweedsmuir Contest. A quilt was given to a member who lost her home by fire and 34 knitted squares sent the W.V.S. *Sutton* entertained the county annual meeting. Several donations are listed: \$5 High School Sport's Club, \$25 Brome-Missisquoi Hospital, and

\$5 to an orphanage in England. An auction sale netted \$11.10.

Compton: *Cookshire* had a talk on "American Violents". One member, Mrs. E. C. James, is a member of the UN Association in Canada. Clothing has been sent to W.V.S. and \$25 realized from a rummage sale. *East Clifton* had a discussion on the uses of maple sugar. The secretary, Mrs. Parkinson, received a letter from a 14 year old Austrian girl who had received clothing from the county exhibit at Cookshire. *Sawyerville* saw two films, "Home and Country", and "Out Beyond Town". Prizes were donated the Cookshire Fair and \$10 to the Legion.

Chat-Huntingdon: *Aubrey-Riverfield* heard a reading, "Cold Courage in the Northland", by Mrs. Osborne Orr. The prize for the finest scrapbook was won by Mrs. G. Easton. *Dundee* entertained the annual county meeting with Mrs. G. E. LeBaron, Q.W.I. president and Miss Heikinen, Household Science teacher, Huntingdon, as guest speakers. *Franklin Centre* had a talk, "The Farm Garden and Proper Rotation of Vegetables", by Mr. Beaudin, agronome. *Hemmingford* had a sale of slips and plants. The Minstrel Show was presented six times with great success. *Howick* gave prizes amounting to \$3.75 in the girls' sewing class at the Fashion Show and a similar amount to the winners in the boys' wood carving class at Howick School. Mrs. Wallace gave a talk on "My Trip West" and Mrs. J. D. Lang read a humorous poem written by a W.I. member's husband. *Huntingdon* donated \$25 for special prizes for the School Fair and the ladies' section of the Huntingdon Fair. Mrs. W. Bernhardt read a history of "Hats", which was followed by a hat parade by the members. *Orms town* voted \$100 to the Barrie Memorial Hospital and realized \$58.15 when the *Hemmingford* Minstrel Show was sponsored in this community.

Gaspe: *L'Anse-aux-Cousins* held a scrambled word contest and heard an article, "The April Garden", read by the convenor of Agriculture. *Haldimand* had a demonstration on judging sugar cookies. Children's Fairs and the procuring of seeds were discussed and a food sale netted \$10.70. "Wakeham received two brooches from a W.I. pen pal in England, which are to be sold to raise money for the branch. *York* used the money raised from the rollcall, "Pay your age", to purchase a game for the school. a "Test your knowledge" quiz was featured.

Gatineau: *Aylmer East* held the meeting in the Recreation Hall of the E. B. Eddy Co., with a conducted tour and a talk on the products made there. A lunch was served by the plant dietitian. *Eardley* realized \$18.65 from the sale of a quilt and \$1.95 from the tea prize. A reading, "Pat Murphy's dilemma", and a contest, "Night and Day" formed the program. An essay contest, "The Country Women's Day", had three entries. These were judged by Mrs. F. Lusk, and the convenor of Publicity, Mrs. Wm. Dowd, won the prize. *Lakeview* gave \$15 to a



Leaders of rural women, from across Canada, attended a three-day meeting recently in Toronto to make plans for the triennial conference of the Associated Country Women of the World, to be held in Canada for the first time this summer. Discussing plans at the meeting are (left to right) Mrs. G. E. LeBaron, North Hatley, Que., Q.W.I. President and Chairman of the Exhibits Committee for the Conference; Mrs. G. Gordon Maynard, Unionville, Ont., co-chairman of the costume committee for the Canada Day pageant, and Mrs. Howard Thomas, Woodstock, N.B., Convenor of post-conference tours across Canada.

family who was burned out and \$25 to the Flood Relief. In this branch the school children knitted the wool squares, with prizes given for the best. First Aid kits were sent to a local school, with supplies to be replenished each month. A talk was given by the School Inspector and another by the local agronomist on "School Fairs". Through the latter, seeds have been supplied for this project. *Rupert* is planning a coronation celebration in conjunction with other local groups. A conducted tour was made of Ottawa radio stations, the Dominion Mint, and press rooms of Ottawa newspapers. Bulbs have been replanted in the cemetery. *Wakefield* made large donations to Wakefield Hospital, National Institute for the Blind, Veterans' League and Cancer Society. A paper on "Vitamins and Diet" was read by the convenor of Home Economics. *Wright* heard a paper on "The Story of Meat from Ancient Times", with different methods of preserving. Members modelled aprons, followed by an auction sale which realized \$8.20. The Red Cross Drive, sponsored by the W.I. brought \$201.80. A prize was won by a member for knitted squares.

Jacques Cartier: *Ste. Annes* held an open house party at the home Mrs. Wishart, Senneville. Several members attended a meeting of the local CAC and learned many interesting facts. A gift was presented the retiring president, Mrs. J. Howe, and \$5 sent to the Cancer Society.

Laviolette: *Parent* sent 200 knitted squares to the W.V.S., one member, Mrs. L. Beaudin, making 70. A linen table cloth was given her as an award for such a record. A grab bag sale netted \$6.50 and a donation of \$5 was given Flood Relief. Three new members enrolled in this branch, which is bi-lingual in character. The meeting closed with an enjoyable sing-song.

Megantic: *Inverness* has received seeds for the School Fair and donated \$5 to the I.O.O.F. for wood. *Lemesurier* entertained the county annual meeting.

Missisquoi: *Cowansville* heard articles by the convenors of Welfare and Health, on "Blindness", and Citizenship on "A Visit of the Queen and Queen Mother to Sandringham W.I." Also, a talk on the experiences of a friend who is a missionary in the Arctic. Mrs. Winsor spoke briefly on the Colombo plan. *Dunham* had a paper by the Citizenship convenor on "Human Rights". A quilt was donated to be sold and a food parcel sent overseas. *Fordyce* enjoyed a television program. Two contests were featured, one on Canada and the other Royal Homes. The half-yearly fee of \$25 was paid for their Austrian adoptee.

Pontiac: *Bristol* discussed a float for the Coronation celebration at Shawville. Mrs. J. C. Glenn, convenor of Agriculture, read a paper on "An April Garden", *Elmside* held a discussion, "Where are the new farm leaders coming from", under the convenorship of Mrs. M. Stewart. At *Quyon*, Major Dawson, assisted by Mr. Maloney, both of the Civil Defense Organization, Ottawa, showed a film, "The Walking Point" illustrative of that work in England. *Shawville* had the popular exchange of slips and bulbs. Miss Irene Shaw, convenor of Agriculture, read a paper on "Spring Gardening" and a float for Coronation celebration was discussed. *Wyman* is investing money from the sale of cook books in bonds to form a fund to build a community centre. The convenor of Agriculture, Mrs. H. A. Kelly, read a humorous poem "The House is Now a Home", and reports were heard of the recent successful course given by Miss Bruneau. A cup and saucer shower was held for the retiring secretary, Mrs. H. Graham.

Quebec: *Valcartier* had a five minute talk on "Health" and voted \$50 to the Cancer Society. Help, clothing, money, and food was sent a needy family and a discussion held on "What we know about Turkey". Four new members were enrolled.

Rouville: *Abbotsford* had as guest speaker, Mrs. H. Ellard, Q.W.I. 2nd Vice-president, who gave a very instructive talk on the current work of the Institute, including arrangements being made for the A.C.W.W. convention to be held in Toronto in August.

Richmond: *Cleveland* had a demonstration on fancy sandwiches by the Home Economics convenor. Prizes were awarded to three members achieving perfect attendance for the past year. Returns from an auction and sale of plants, with a donation of \$2 from a visitor enriched the treasury. The convenor of Agriculture read a paper on F.A.O. *Denison's Mills* made plans to decorate the local community hall to commemorate Coronation year. Each member brought an article to be used for the sale table and a member, Mrs. E. Carson, donated one of her pictures to help raise funds. *Gore* decided to give pins to all



The glove-makers at Wyman with their instructor Miss Ida Bruneau.

members having perfect attendance in 1953-54. A membership in the CAC was taken out for the Home Economics convenor and garden seeds were given out. *Melbourne Ridge* had a paper on "Forestry Conservation", by the convenor of Agriculture, Mrs. J. Hamilton and Mrs. W. Beers and Mrs. L. Driver won a contest on that topic. The W.I. hall has received the gift of two refrigerators. The popular sale of slips, etc. was held and two members whose birthdays were in that month donated articles for sale. *Richmond Hill* held a cookie contest. Clothing and knitted squares have been sent to W.V.S. A quiz on history was featured, Mrs. L. Healy and Mrs. J. Mason winning the prizes and donations of \$5 each were given the Red Cross and Sherbrooke Hospital. *Richmond Y.W.I.* held a dance and a contest on decorating an egg was a feature of the program at the regular meeting. *Shipton* had a talk by Mr. W. Dennison on "Grains, Milling and Mixing". Teen age dances and parties are being sponsored. Mrs. G. Crack gave a Stanley Products demonstration. *Windsor Mills* had a glove course under Miss Bruneau's supervision. The annual donation of \$10 to the School was made and \$2 to the Notre Dame Convent. Mrs. J. Allan was in charge of the social hour when a quiz was held and a magazine picture contest.

Shefford: *Granby Hill* entertained the county meeting. The usual exchange of slips was held at the monthly meeting. Warden presented a life membership to Mrs. H. McGovern, and Mrs. G. Malboeuf gave a talk on "Swedish Massage". An African violet and a coronation tray were sold. Warden J.W.I. had a course in leatherwork by Miss Bruneau. Bingo was enjoyed at the meeting and a discussion on seams and the kinds of material on which they are used was held.

Sherbrooke: *Ascot* made a presentation to the hon. president, Mrs. B. Hyatt who is leaving for a visit to England. A discussion on the article, "Making Baking Easier", by Miss M. Trapp in the Journal, was held and a sale of mystery parcels. The Nurse's bursary and share of amount to European adoptee were paid, both county

(continued on inside back cover)

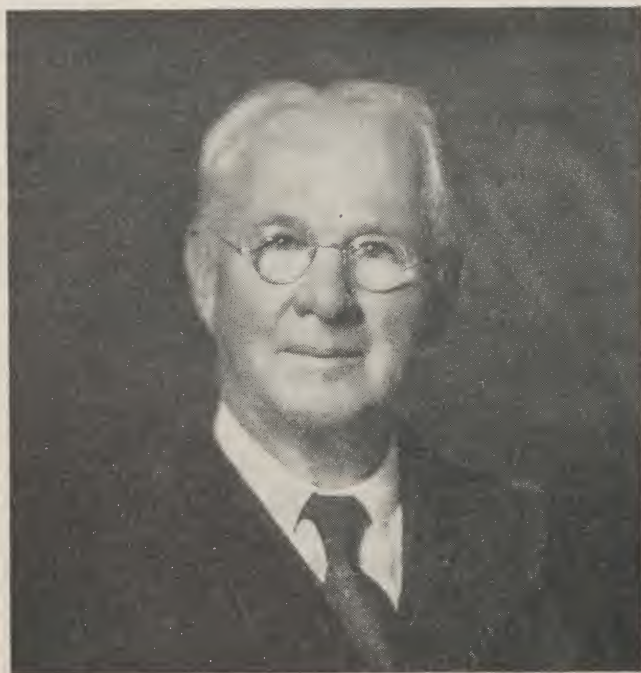


THE COLLEGE PAGE

The Macdonald Clam

Notes and News of Staff Members and Former Students

Dr. Snell Passes



Dr. John F. Snell, Macdonald College's first professor of chemistry, passed away on May 20th at the age of eighty three.

Dr. Snell, a graduate of the University of Toronto and of Cornell University, was appointed to Macdonald College when the first staff was being assembled in 1907, and he and Mrs. Snell arrived in Ste. Annes even before the buildings of the new college were completed. For the first few months they lived in temporary quarters in what is now the Men's Residence, which was still surrounded by piles of earth and rubble over which they had to climb to reach their apartment.

For the next twenty-nine years he served as professor of chemistry, retiring in 1936 with the title of Professor Emeritus. He and Mrs. Snell continued to make their home in Ste. Annes until 1950, when they moved to Dr. Snell's old home in London, Ont. He remained active during his years of retirement, taking charge of a corres-

pondence course in chemistry for service men for the Canadian Legion, continuing his research, and spending a great deal of time and effort in compiling a most comprehensive and detailed history of Macdonald College which is an invaluable source of information on the inception, construction and evolution of the College through the years.

He was a distinguished chemist; one of the band of research experts to whom Canadian agriculture owes much. One of his chief interests was the chemistry of maple sugar, and research in this line claimed most of the time that could be spared from teaching. From 1935 to 1946 he was secretary-treasurer of the Canadian Committee on Sugar Analysis, and in 1936 he was a delegate to the International Commission on Uniform Methods of Sugar Analysis, meeting in England.

He was a charter member of the Agricultural Institute of Canada and an original Fellow of the Chemical Institute of Canada, a Fellow of the American Association for the Advancement of Science and a former president of the Montreal section of the Society of Chemical Industry. A few years ago he was presented with a diploma from the American Chemical Society certifying to the completion of fifty years of loyal support and faithful services to the society and its activities.

During his term at Macdonald, Dr. Snell was for a time a member of Senate of McGill University, and was Acting Dean of the Faculty of Agriculture from 1932 to 1934.

He was a devoted member of the United Church at Ste. Anne de Bellevue, where he served many years as superintendent of the Sunday School, and where he was a member of the board of Elders for thirty-seven years. The home on the campus in which he lived for so many years was dedicated as "Snell House" in his honour on May 31, 1952.

Our deepest sympathy is extended to Mrs. Snell, his son Arthur, his daughter, Dora, and his two sisters Mrs. Mabel Scream and Miss Mary Snell. Dr. Snell's kindly personality will not soon fade from the memories of his former colleagues at Macdonald College.

Breeding for Broiler Production

The spectacular increase in number of broilers produced in recent years has stimulated interest in breeding for broiler improvement. Some of the more important traits which are receiving attention, include desirable conformation and high feed efficiency of the broilers as well as satisfactory egg production and high hatchability of the parent stock.

The breeder must decide whether he will select almost entirely for broiler qualities such as broad-breastedness and rapid growth or whether he will also lay equal stress on egg production and hatchability. If the first method is followed it is likely that rapid progress will be made for broiler qualities but egg production and hatchability may be so low as to make the strain unprofitable for the production of broilers. On the other hand, it is unlikely that a strain could be developed which possesses both egg producing ability and broiler qualities to the highest degree although some strains are fairly satisfactory in both these respects.

One solution to the problem of obtaining good broiler chicks economically is the crossing of broiler strain males with females of a good laying strain. In this way some of the desirable conformation of the broiler strain can be retained in the crossbred broilers, and the high egg production of the female line along with good hatchability, will insure economical production of broiler chicks.

Another advantage of crossing two breeds for the production of broilers is the hybrid vigour, expressed by rapid growth, sometimes exhibited by crossbreds. That differences in hybrid vigour will be obtained from various crosses was shown at the Experimental Station, Fredericton, N.B. where four distinct strains of New Hampshires bred for broiler qualities were crossed with the Frederic-

ton Station strain of Barred Rocks. The male progeny of the most successful cross were over one-half pound heavier at twelve weeks of age than the purebred broiler chicks, whereas some of the crossbreds weighed less than the purebred broilers.

Since feed efficiency tends to follow rate of growth, the performance of the crossbreds in comparison with the purebred parental strains is an important consideration when selecting two strains for the production of crossbred broilers.

The Month With the W.I.

projects. *Belvidere* heard an article "Rural Welcome to Immigrants", read by the Citizenship convenor. A donation of \$6 was given for hot lunches for two school children. *Brompton Road* heard a talk on "Education" by Mrs. D. Cullen and another on "Gardening" by Mrs. H. Clark. The county president, Miss V. Hatch, presented gifts to the retiring president and secretary, Mrs. Billings and Mrs. Clark. Donations of \$10 each are reported to the Red Cross, Cancer Fund, Sherbrooke Hospital and \$5 to the Blind Campaign. *Cherry River* presented a gift to the retiring president. A discussion on the turkeys raised by the members was held and the ever popular sale of slips, etc. helped the funds. *Lennoxville* heard hints on cleaning silver given by the Home Economics convenor, Mrs. C. G. Skinner. A box of cotton for the Cancer Society has been packed by the Welfare and Health convenor, Mrs. Day. This branch's share of the Nurse's Bursary and European adoptee was paid. At *Milby* Mrs. C. Graham gave a talk on "Publicity". Lunch for two children attending the school at *Lennoxville* is to be paid until the end of the school term. The share in the Nurse's Bursary was paid. At *Orford* the convenor of Home Economics gave a talk on the latest uses of plastics in the home. A food sale was held.



There is nothing the Chairman of the Quebec Poultry Industry Committee likes better than presiding at a chicken barbecue — the bigger the better. The central figure in the first picture, Prof. Maw turns the chickens at just the right moment to achieve the maximum of tenderness and flavour. In the second picture the guests (members of the Canadian Feed Manufacturers' Association, the R.O.P. Poultry Breeders of Quebec and the Quebec Poultry Industry Committee, who met at Macdonald last month) load their plates with chicken and all the trimmings.



THE MACDONALD LASSIE